

**Having described the invention, the following is claimed:**

1. A system enabling minimally invasive procedures at a surgical location at or near the spine of a patient, said system comprising:

an elongate body having an inner surface defining a passage extending through the elongate body and through which surgical instruments can be inserted to the surgical location, said elongate body capable of having a configuration when inserted within the patient wherein the cross-sectional area of said passage at a first location is greater than the cross-sectional area of said passage at a second location, wherein the first location is distal to the second location; and

a support arm configured to support the elongate body outside the patient when the system is applied to the patient.

2. The system of Claim 1, wherein the support arm is operably connected to a proximal end of the elongate body.

3. The system of Claim 2, wherein the elongate body is arranged along an axis and the support arm is configured to substantially surround the axis when the elongate body is received by the support arm.

4. The system of Claim 1, wherein the support arm comprises an arcuate portion at least partially surrounding a proximal portion of the elongate body.

5. The system of Claim 4, wherein the arcuate portion extends more than 180 degrees around the proximal portion of the elongate body.

6. The system of Claim 1, further comprising a viewing device support.

7. The system of Claim 6, wherein the viewing device support is coupled with the support arm.

8. The system of Claim 6, further comprising a viewing device.

9. The system of Claim 8, wherein the viewing device comprises a camera.

10. The system of Claim 8, wherein the viewing device comprises an endoscope.
11. The system of Claim 8, wherein the viewing device comprises a microscope.
12. The system of Claim 8, wherein the viewing device comprises magnifying glasses.
13. A system for providing access to a surgical location within a patient, said device comprising:
  - an elongate body having an inner surface defining a passage extending through the elongate body and through which surgical instruments can be inserted to the surgical location, said elongate body capable of having a configuration when inserted within the patient wherein the cross-sectional area of said passage at a first location is greater than the cross-sectional area of said passage at a second location, wherein the first location is distal to the second location; and
  - an elongate support arm comprising an arcuate portion, the elongate support arm configured to support the elongate body outside the patient when the system is applied to the patient.
14. The system of Claim 13, wherein the elongate support arm is configured to removably receive the proximal end of the elongate body.
15. The system of Claim 13, wherein the elongate body is arranged along an axis and the arcuate portion of the elongate support arm is substantially centered on the axis when the elongate body is received by the elongate support arm.
16. The system of Claim 13, further comprising a viewing device support.
17. The system of Claim 16, further comprising a viewing device.
18. The system of Claim 16, wherein the viewing device support is coupled with the elongate support arm.
19. The system of Claim 18, wherein the viewing device comprises a camera.

20. The system of Claim 18, wherein the viewing device comprises an endoscope.
21. The system of Claim 18, wherein the viewing device comprises a microscope.
22. The system of Claim 18, wherein the viewing device comprises magnifying glasses.
23. A device for providing access to a first location adjacent the spine of a patient, comprising:
- an elongate body having a proximal end and a distal end and a passage extending through the elongate body through which surgical instruments can be delivered, said elongate body being enlargeable such that the passage at a distal location is larger than the passage at a proximal location; and
  - a support arm operably connected to the proximal end of the elongate body, the support arm extending generally transverse to an axis defined along the passage of the elongate body between the proximal and distal ends, the support arm configured to support and position the elongate body outside of the patient when the device is applied to the patient.
24. The device of Claim 23, wherein the elongate body is configured with an amount overlap, the amount of overlap being reduced when the elongate body is enlarged.
25. The device of Claim 23, wherein the elongate body has a length extending between the first location and the skin of the patient when the device is applied to the patient.
26. A system enabling minimally invasive procedures at a surgical location at or near the spine of a patient, said system comprising:
- an elongate body having an inner surface defining a passage extending through the elongate body and through which surgical instruments can be inserted to the surgical location, said elongate body being expandable from a first configuration for insertion into a patient to a second configuration when inserted within the patient wherein the cross-sectional area of said passage at a first location is greater than the

cross-sectional area of said passage at a second location, wherein the first location is distal to the second location; and

a support arm configured to support the elongate body outside the patient when the system is applied to the patient.

27. The system of Claim 26, wherein the elongate body is arranged along an axis and the support arm is configured to substantially surround the axis when the elongate body is received by the support arm.

28. The system of Claim 26, wherein the support arm comprises an arcuate portion at least partially surrounding a proximal portion of the elongate body.

29. The system of Claim 28, wherein the arcuate portion extends more than 180 degrees around the proximal portion of the elongate body.

30. The system of Claim 26, further comprising a viewing device support.

31. The system of Claim 30, wherein the viewing device support is coupled with the support arm.

32. The system of Claim 30, further comprising a viewing device.

33. The system of Claim 32, wherein the viewing device comprises a camera.

34. The system of Claim 32, wherein the viewing device comprises an endoscope.

35. The system of Claim 32, wherein the viewing device comprises a microscope.

36. The system of Claim 32, wherein the viewing device comprises magnifying glasses.

37. An access device enabling minimally invasive procedures at a surgical location at or near the spine of a patient, said device comprising:

an elongate body having an inner surface defining a passage extending through the elongate body and through which surgical instruments can be inserted to the

surgical location, said elongate body being expandable from a first configuration for insertion into a patient to a second configuration when inserted within the patient wherein the cross-sectional area of said passage at a first location is greater than the cross-sectional area of said passage at a second location, wherein the first location is distal to the second location; and

a support arm.

38. The device of Claim 37, wherein the support arm is configured to engage the elongate body proximal of the first location

39. The device of Claim 37, wherein the support arm is configured to support the elongate body proximal of the first location.

40. The device of Claim 37, further comprising a viewing device coupled with the support arm.

41. The device of Claim 40, wherein the support arm is configured to support the viewing device.

42. The device of Claim 41, wherein the support arm is configured to indirectly support the viewing device.

43. The device of Claim 41, wherein the viewing device is adjustable along an axis that is generally parallel to a longitudinal axis of the elongate body.

44. The device of Claim 40, wherein the viewing device comprises a viewing element.

45. The device of Claim 44, wherein the viewing element includes a camera.

46. The device of Claim 44, wherein the viewing element includes an endoscope.

47. The device of Claim 44, wherein the viewing device comprises a microscope.

48. The device of Claim 44, wherein the viewing device comprises magnifying glasses.

49. The device of Claim 44, wherein the viewing element includes a camera and an endoscope.

50. The device of Claim 49, wherein the viewing element is configured to be extended through the passage toward the surgical location at or near the spine.

51. The device of Claim 40, wherein the viewing device is configured to be extended through the passage toward the surgical location at or near the spine.

52. The device of Claim 37, further comprising a viewing device operably coupled with the elongate body.

53. The device of Claim 52, wherein the viewing device is adjustable along an axis that is generally parallel to a longitudinal axis of the elongate body.

54. The device of Claim 52, wherein the viewing device comprises a viewing element.

55. The device of Claim 54, wherein the viewing element includes an endoscope.

56. The device of Claim 54, wherein the viewing element includes a camera.

57. The device of Claim 54, wherein the viewing device comprises a microscope.

58. The device of Claim 54, wherein the viewing device comprises magnifying glasses.

59. The device of Claim 54, wherein the viewing element includes a camera and an endoscope.

60. The device of Claim 59, wherein the viewing element is configured to be extended through the passage toward the surgical location at or near the spine.

61. The system of Claim 37, wherein the support arm extends generally perpendicular to a longitudinal axis of the elongate body when the support arm engages the elongate body.

62. An access device enabling minimally invasive procedures at a surgical location at or near the spine of a patient, said device comprising:

an elongate body having an inner surface defining a passage extending through the elongate body and through which surgical instruments can be inserted to the surgical location, said elongate body being expandable from a first configuration for insertion into a patient to a second configuration when inserted within the patient wherein the cross-sectional area of said passage at a first location is greater than the cross-sectional area of said passage at a second location, wherein the first location is distal to the second location; and

a viewing device operably coupled with the elongate body.

63. The device of Claim 62, wherein the viewing device is adjustable along an axis that is generally parallel to a longitudinal axis of the elongate body.

64. The device of Claim 62, wherein the viewing device comprises a viewing element.

65. The device of Claim 64, wherein the viewing element includes an endoscope.

66. The device of Claim 64, wherein the viewing element includes a camera.

67. The device of Claim 64, wherein the viewing element includes a camera and an endoscope.

68. The device of Claim 67, wherein the viewing element is configured to be extended through the passage toward the surgical location at or near the spine.

69. A method of providing access to a surgical location within a patient, comprising

providing an elongate body having an inner surface defining a passage extending therethrough and a support arm configured to support the elongate body outside the patient;

inserting the elongate body into an incision in the patient; and

configuring the elongate body such that the cross-sectional area of said passage at a first location is greater than the cross-sectional area of said passage at a second location, wherein the first location is distal to the second location.

70. The method of Claim 69, further comprising inserting a surgical instrument through the passage to the surgical location.

71. The method of Claim 69, wherein the support arm further comprises an arcuate portion and further comprising positioning the elongate body adjacent the arcuate portion of the support arm.

72. The method of Claim 71, wherein when the elongate body is positioned adjacent the arcuate portion, an axis of the elongate body and an axis of the arcuate portion are aligned.

73. The method of Claim 72, wherein the arcuate portion extends more than 180 degrees around the proximal portion of the elongate body.

74. The method of Claim 69, further comprising providing a viewing device and a viewing device support and orienting the viewing device toward the surgical location.

75. The method of Claim 74, wherein the viewing device comprises a camera.

76. The method of Claim 74, wherein the viewing device comprises an endoscope.

77. The method of Claim 74, wherein the viewing device comprises a microscope.

78. The method of Claim 74, wherein the viewing device comprises magnifying glasses.



79. The method of Claim 74, wherein the viewing device support is coupled with the support arm.

80. A method of providing access to a spinal location within a patient, comprising  
providing an elongate body having an inner surface defining a passage extending therethrough and a support arm configured to support the elongate body outside the patient;

inserting the elongate body into an incision in the patient;

advancing the elongate body to the spinal location; and

configuring the elongate body such that the cross-sectional area of said passage at a first location is greater than the cross-sectional area of said passage at a second location, wherein the first location is distal to the second location.

81. The method of Claim 80, further comprising inserting a surgical instrument through the passage to the surgical location.

82. The method of Claim 80, wherein the support arm further comprises an arcuate portion and further comprising positioning the elongate body adjacent the arcuate portion of the support arm.

83. The method of Claim 82, wherein when the elongate body is positioned adjacent the arcuate portion, an axis of the elongate body and an axis of the arcuate portion are aligned.

84. The method of Claim 82, wherein the arcuate portion extends more than 180 degrees around the proximal portion of the elongate body.

85. The method of Claim 80, further comprising providing a viewing device and a viewing device support and orienting the viewing device toward the surgical location.

86. The method of Claim 85, wherein the viewing device comprises a camera.

87. The method of Claim 85, wherein the viewing device comprises a microscope.

88. The method of Claim 85, wherein the viewing device comprises magnifying glasses.

89. The method of Claim 85, wherein the viewing device comprises an endoscope.

90. The method of Claim 89, wherein the viewing device comprises a camera.

91. The method of Claim 90, wherein the viewing device support is coupled with the support arm.

92. The method of Claim 80, wherein the step of configuring the elongate body further comprises expanding the elongate body such that the cross-sectional area of the passage at a first location is greater than the cross-sectional area of said passage at a second location, wherein the first location is distal to the second location.

93. A method of providing access to a first location adjacent the spine of a patient, comprising:

inserting an elongate body into the patient to the first location, the elongate body having a proximal end, a distal end, and a passage extending therethrough;

supporting the elongate body with an arm outside of the patient between the proximal end and the distal end, the arm extending generally transverse to an axis defined along the passage of the elongate body; and

expanding the elongate body within the patient to provide access to the first location.

94. The method of Claim 93, further comprising articulating the arm to position the elongate body outside of the patient.

95. The method of Claim 93, further comprising operably connecting the support arm to the proximal end of the elongate body.

96. The method of Claim 93, wherein the step of expanding the elongate body expands the passage adjacent the first location such that the passage adjacent the first location is larger than the passage adjacent the proximal end.

97. The method of Claim 93, further comprising delivering a surgical instrument through the elongate body to the first location.

98. The method of Claim 93, wherein supporting the elongate body further comprises positioning the elongate body adjacent an arcuate portion of the arm.

99. The method of Claim 98, wherein the arcuate portion extends more than 180 degrees around the elongate body.

100. The method of Claim 93, further comprising providing a viewing device and a viewing device support and orienting the viewing device toward the surgical location.

101. The method of Claim 100, wherein the viewing device comprises a camera.

102. The method of Claim 100, wherein the viewing device comprises an endoscope.

103. The method of Claim 102, wherein the viewing device comprises a camera.

104. The method of Claim 100, wherein the viewing device comprises a microscope.

105. The method of Claim 100, wherein the viewing device comprises magnifying glasses.

106. The method of Claim 100, wherein the viewing device support is coupled with the support arm.